

Claim 51 explicitly requires "transmitting constant envelope modulated signal bursts from the mobile to the satellite relay station over an uplink RF channel...and... receiving linearly modulated signal bursts from the satellite relay station at the mobile phone over a downlink" (emphasis added). Thus, the mobile phone must transmit a signal burst to the satellite relay station using one form of modulation on the uplink (i.e., constant envelope modulation), and receive a signal burst from the satellite relay station that is modulated using a second, different form of modulation (i.e. linear modulation). As stated in Applicants' last Response¹, Ziv and Hannah may teach linear modulation and constant envelope amplitude, respectively, but neither teaches or suggests employing a first modulation scheme on the uplink and a second, different modulation scheme on the downlink.

Despite this, the Examiner contends that modifying Ziv with Hannah obviates claim 51, and asserts:

"It would have been obvious...to provide the step of transmitting constant envelope modulated signal bursts...over an uplink...as taught by Hannah because Hannah teach[es] the desirable advantage of providing an increase in operational efficiency, a reduction in overall size and a reduction in DC power consumption by the unit, which substantially lowers the cost of the unit and said lower cost of the unit being desirable to achieve more cost efficient system operation in Ziv et. al."

However, the proffered motivation is nothing more than a generalized statement that is applicable to most, if not all, communications systems and methods. Applicants' note that the idea behind most of the innovations made in the field of communications (as well as those in other fields) is to decrease costs and increase operational efficiency.

The fact that Hannah teaches increasing the operational efficiency of a product, as well as reducing its overall size and power consumption, means nothing. Hannah never suggests employing a first modulation scheme on the uplink and a second, different modulation scheme on the downlink so that a user may communicate with

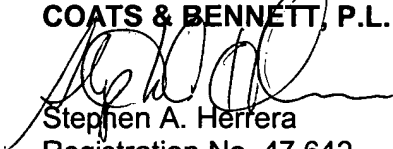
¹ See Applicants' Response dated August 30, 2002.

either the terrestrial network or the satellite network. This is because Hannah is concerned only with satellite systems and modifications to the outdoor unit (see reference number 14 in Figure 1). Ziv also fails to suggest first and second different modulation schemes on a single channel pair because Ziv is concerned only with searching a received multi-path signal subject to power control (see Ziv, col. 10, lines 47-49), not a dual-mode communications device.

As neither reference deals with the same subject matter as Applicants invention, where does the Examiner find the motivation to combine? It appears as if the rejection is nothing more than a collection of separate teachings from a plurality of references glued together with a "blanket," generalized motivation. The idea to transmit a constant envelope modulated signal over the uplink and receive a linearly modulated signal over the downlink could only have come from Applicants' disclosure. As such, the Examiner has engaged in improper hindsight reconstruction using Applicants' own disclosure as a blueprint.

Therefore, the §103 rejection should be withdrawn as improper as neither Ziv nor Hannah, alone or in combination, teach or suggest using both transmitting constant envelope modulated signal bursts and receiving linearly modulated signal bursts simultaneously on a single channel pair. Accordingly, Applicants respectfully request the allowance of claim 51, and its dependent claims 52-54.

Claims 47 and 55 are apparatus claims for carrying out the method of claim 51, and contain similar language. Thus, for the reasons stated above with respect to claim 51, claims 47 and 55 also define patentable subject matter over the cited art. Accordingly, Applicants respectfully request the allowance of claims 47 and 55, as well as their respective dependent claims 48-50, and 56-58.

Respectfully submitted,
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